

# MICHIGAN DEPARTMENT OF NATURAL RESOURCES Wildlife Division Report No. 3393 April 2003

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## 2002 MICHIGAN BLACK BEAR HUNTER SURVEY

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## **ABSTRACT**

A survey of bear hunters was conducted following the 2002 hunting season to determine hunter participation, hunting methods, bear harvest, and hunter satisfaction. In 2002, an estimated 8,575 hunters spent 59,917 days afield and harvested 2,282 bears, an increase in harvest of 1% from 2001. Statewide, 27% of hunters harvested a bear. Baiting was the most common hunting method used to locate and harvest bears. Statewide, most hunters (54%) rated their hunting experience as very good or good. Also, most hunters (72%) approved of the preference-point system for the distribution of hunting licenses.

## INTRODUCTION

Beginning in 1990, the Michigan Department of Natural Resources (MDNR) created black bear (*Ursus americanus*) management units (Figure 1) and limited the number of bear hunting licenses issued for each unit. Before 1990, an unlimited number of bear licenses were sold, and licenses were valid in all areas open to bear hunting. In 2001, the MDNR modified the licensing system by implementing a preference-point system for issuing bear hunting licenses. Under this system, hunters received one preference point if they applied for a hunt but were not selected in the drawing. Hunters also could obtain a preference point by completing an application but forgoing the drawing. Applicants with the greatest number of preference points had the greatest chance of being selected for a hunt.

In 2002, ten bear management units in northern Michigan totaling 30,671 square miles were open for bear hunting (Figure 1). The bear management units in the Lower Peninsula (LP) were adjusted and expanded slightly in 2002. Boundaries of these units were changed to coincide with county boundaries. The Baldwin Bear Management Unit was also expanded to



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account for an expanding bear population in the LP. Bear could be hunted September 10 – October 26 in most of the Upper Peninsula (UP) units except the Drummond Management Unit (September 10-16) and September 20–26 in the northern LP units. The Red Oak Management Unit in the LP also had an archery-only hunt during October 4-10. The Wildlife Division set license quotas for each management unit and allocated 10,844 licenses among 43,482 eligible applicants using the preference-point system. Licenses were valid on all land ownership types and allowed a hunter to take one bear of either sex, excluding cubs and female bears with cubs. Bear could be harvested with either firearm or archery equipment, except for the special archery-only hunt in the Red Oak Management Unit. Hunters could use bait or dogs to hunt bears (except dogs could not be used during September 10-15 in the UP and during the archery-only season in the Red Oak Management Unit).

The MDNR has the authority and responsibility to protect and manage the wildlife resources of the State of Michigan. Harvest surveys are one of the primary management tools used by the Wildlife Division to accomplish its statutory responsibility. Estimating harvest, hunting effort, and hunter satisfaction are among the primary objectives of these surveys. Estimates derived from harvest surveys, as well as harvest reported by hunters at mandatory registration stations, are used to monitor bear populations and establish harvest regulations.

#### **METHODS**

Following the 2002 bear hunting season, a questionnaire was sent to 2,580 randomly selected successful applicants that had purchased a bear hunting license (resident, senior, and nonresident bear licenses, and comprehensive lifetime license). Hunters receiving the questionnaire were asked to report whether they hunted, number of days spent afield, whether they harvested a bear, and their hunting methods. Successful hunters also were asked to report harvest date, sex of the bear taken, and harvest method. Finally, all bear hunters were asked to rate their overall hunting experience and indicate whether they approved of the preference-point system that was used to distribute hunting licenses.

Estimates were calculated using a stratified random sampling design (Cochran 1977) and were presented along with their 95% confidence limit (CL). This confidence limit could be added and subtracted from the estimate to calculate the 95% confidence interval. The confidence interval is a measure of the precision associated with the estimate and implied that the true value would be within this interval 95 times out of 100. Estimates were not adjusted for possible response or nonresponse bias.

Questionnaires were initially mailed during early November 2002. A reminder note and up to two follow-up questionnaires were mailed to nonrespondents. Although 2,580 people were sent the questionnaire, 32 surveys were undeliverable resulting in an adjusted sample size of 2,548. Questionnaires were returned by 2,201 people, yielding an 86% adjusted response rate.

## **RESULTS**

In 2002, 9,104 licenses were purchased for the bear hunting season, an increase of 10% from 2001 (Table 1). Most of the people buying a license were men (92%), and the average age of the license buyers was 44 years (Figure 2). About 2% of the license buyers were younger than 17 years old (N = 188).

Nearly 94% ( $\pm 1\%$ ) of the license buyers hunted bears (Tables 1 and 2). These hunters spent 59,917 days afield ( $\bar{x}=7.0$  days/hunter) and harvested 2,282 bears, an increase of about 1% from 2001 (Figure 3, Table 2). The number of hunters and hunting effort, as well as the number of bear harvested, in 2002 were the highest numbers recorded since the present bear management system was initiated in 1990 (Figure 3). Counties having the highest number of bear hunters and bears harvested included Baraga, Ontonagon, Marquette, and Houghton (Table 3).

About 35% of the bear hunters hunted on private lands only, 45% hunted on public lands only, and 19% hunted on both private and public lands (Table 4). Bear hunters spent 20,683 days afield on private land, 24,327 days hunting on public land only, and 13,799 days hunting on both private and public lands (Table 5). Of the 2,282 bear harvested in 2002, 35  $\pm$  3% of these bears were taken on private land (791  $\pm$  76 bears). About 64  $\pm$  3% of the harvest (1,469  $\pm$  102 bears) were taken on public land. A few bear (22  $\pm$  13 bears) were harvested from land of unknown ownership.

Of the bears harvested,  $63 \pm 3\%$  were males (1,441  $\pm$  102 bears) and  $36 \pm 3\%$  females (816  $\pm$  78 bears, Table 6). Statewide, 27% of hunters harvested a bear in 2002 (Table 2), a decrease from 29% hunter success reported last year (Frawley 2002). Hunter success ranged from 6-63% among the bear management units.

Most hunters (76  $\pm$  1%) used only firearms while hunting bear, although 24  $\pm$  1% of the hunters used archery equipment only or a combination of firearm and archery equipment (Table 7). Moreover, most hunters (83  $\pm$  1%) relied primarily on baiting as a means of locating and attracting bears (Table 8). About 12  $\pm$  1% of hunters relied primarily on dogs alone or in combination with baiting to locate bears. About 3% of hunters relied on a hunting method not involving dogs or bait.

About 82  $\pm$  2% of the harvested bears were taken with the aid of bait (Table 9). The proportion of bears harvested with bait was nearly identical to the proportion of hunters using bait as their primary means of locating bears (82% versus 83%; Tables 8 and 9). Although 12% of the hunters depended primarily on dogs to locate bears, 17  $\pm$  2% of the harvested bears were taken using dogs. Consequently, hunters using dogs were more likely to harvest a bear than hunters relying on bait only.

Hunter satisfaction is one measure used to assess the Black Bear Management Program in Michigan. Statewide, most hunters (54  $\pm$  2%) rated their hunting experiences as very good or good and 23  $\pm$  1% rated their hunting experiences as being poor or very poor (Tables 3 and 10). Hunter satisfaction is affected by many factors such as hunting success and whether hunting activities were completed without interference (Figure 4). In 2002, 24  $\pm$  1% of the

hunters (2,094  $\pm$  113 hunters) were interfered during their hunt by other hunters. Generally, hunters in the Upper Peninsula were less likely to be interfered by other hunters than hunters in the Lower Peninsula (Tables 3 and 10, Figure 5).

In 2001, a preference-point system was implemented for distributing bear hunting licenses. Hunters were asked whether they approved of this distribution system. Most hunters (72  $\pm$  1%) approved or strongly approved of the system. About 19  $\pm$  1% of the hunters indicated that they were not sure about the system and 8  $\pm$  1% disapproved or strongly disapproved of the system.

### **ACKNOWLEDGEMENTS**

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## LITERATURE CITED

Cochran, W. G. 1977. Sampling techniques. John Wiley & Sons, New York. USA.

Frawley, B. J., 2002. 2001 Michigan black bear hunter survey. Wildlife Division Report 3364. Michigan Department of Natural Resources, Lansing, USA.



Figure 1. 2002 bear management units in northern Michigan.

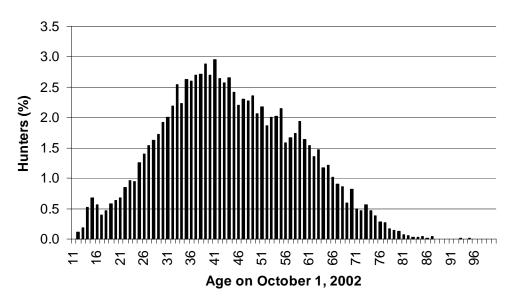


Figure 2. Age of people that purchased a bear hunting license in Michigan for the 2002 hunting season ( $\bar{x}=44$  years). Licenses were purchased by 9,104 people.

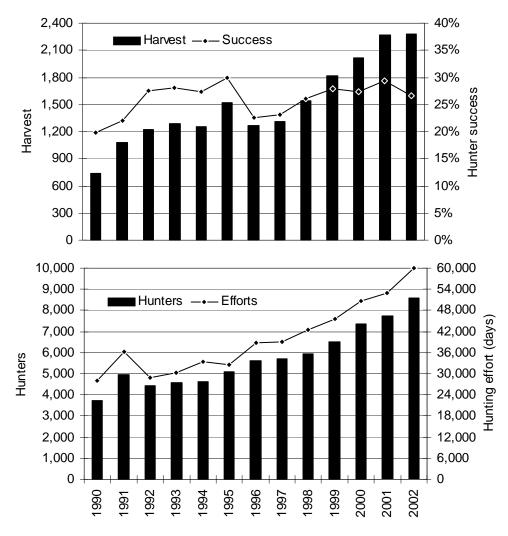


Figure 3. Number of hunters, harvest, hunting effort, and hunting success during bear hunting seasons, 1990-2002.

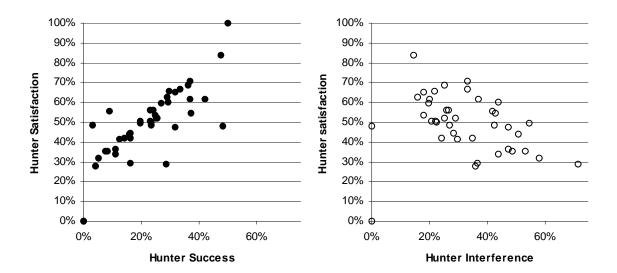


Figure 4. Hunter satisfaction (hunters rating their hunting experience as very good or good) associated with hunter success and hunter interference for each of 42 counties in Michigan during the 2002 bear hunting season. Interference was the proportion of hunters that reported interference from other hunters.

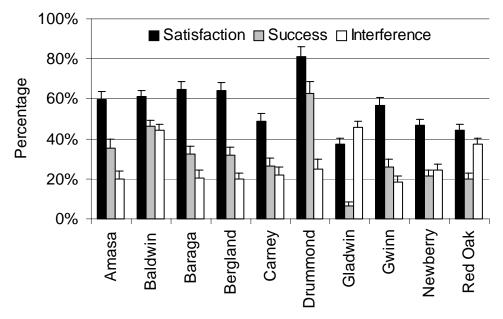


Figure 5. Hunter satisfaction, hunting success, and level of hunter interference in Michigan during the 2002 bear hunting season. Satisfaction measures the proportion of hunters rating their hunting experiences as very good or good. Error bars represent the 95% confidence limit. Interference was the proportion of hunters that reported interference from other hunters.

Table 1. Number of people purchasing hunting licenses for the 2001 and 2002 Michigan bear hunting seasons.

			2002	
	Licenses sold in	1.1	Number of	
Management unit	Licenses sold in 2001	Licenses available	eligible applicants	Licenses sold
Amasa	464	598	2,534	525
Baldwin	41	64	1,677	60
Baraga	1,729	2,174	5,888	1,833
Bergland	1,219	1,654	3,014	1,274
Carney	717	1,058	2,806	888
Drummond	23	18	473	17
Gladwin	179	200	662	152
Gwinn	905	1,168	4,062	986
Newberry	1,874	2,243	10,335	1,870
Red Oak	1,111	1,667	12,031	1,499
Statewide	8,262	10,844	43,482	9,104
Applicants opting for Preference Point <sup>a</sup>	6,839		8,204	

<sup>&</sup>lt;sup>a</sup>Applicants that chose to receive a preference point rather than enter into the drawing for a hunting license.

Table 2. Number of hunters, harvest, hunter success, and hunting effort during the 2002 Michigan bear hunting season.

	Hun	iters	Har	vest	Hunte	r success	Hunting	geffort	Days per h	unter $(\bar{x})$
Manage- ment unit	No.	95% CL <sup>a</sup>	No.	95% CL <sup>a</sup>	%	95% CL <sup>a</sup>	Days	95% CL <sup>a</sup>	Days	95% CL <sup>a</sup>
Amasa	496	11	176	22	36%	4%	3,488	294	7.0	0.6
Baldwin	58	1	27	2	46%	3%	219	10	3.8	0.2
Baraga	1,723	37	560	71	32%	4%	12,011	969	7.0	0.5
Bergland	1,191	26	377	49	32%	4%	7,847	626	6.6	0.5
Carney	841	17	221	34	26%	4%	7,405	584	8.8	0.7
Drummond	17	0	11	1	63%	6%	69	5	4.1	0.3
Gladwin	144	2	9	2	6%	2%	642	25	4.5	0.2
Gwinn	910	23	237	37	26%	4%	6,642	528	7.3	0.5
Newberry	1,772	27	381	49	21%	3%	13,990	918	7.9	0.5
Red Oak	1,424	21	284	39	20%	3%	7,605	365	5.3	0.2
Statewide <sup>b</sup>	8,575	65	2,282	120	27%	1%	59,917	1,736	7.0	0.2

<sup>&</sup>lt;sup>a</sup> 95% confidence limits.
<sup>b</sup>Column totals may not equal statewide totals because of rounding errors.

Table 3. Number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunt interference during the 2002 Michigan bear hunting season.

-	Hunte	ers <sup>a</sup>	Harv	est <sup>a</sup>		nter cess	Hunting (day			nter action <sup>b</sup>		rfered nters <sup>c</sup>
County	Total	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	%	95% CL
Alcona	208	34	48	17	23%	7%	1,269	253	48%	9%	27%	8%
Alger	310	46	72	23	23%	7%	2,302	427	51%	8%	22%	6%
Alpena	134	28	32	14	24%	9%	649	175	56%	11%	26%	10%
Antrim	24	13	3	4	11%	16%	116	68	34%	25%	44%	26%
Arenac	2	1	0	0	0%	0%	13	7	0%	0%	100%	0%
Baraga	1,008	80	270	54	27%	5%	6,443	759	59%	5%	20%	4%
Benzie	2	1	1	1	48%	22%	7	4	48%	22%	0%	0%
Charlevoix	19	11	8	7	42%	29%	62	44	61%	27%	37%	26%
Cheboygan	116	26	19	11	16%	9%	489	136	29%	11%	37%	11%
Chippewa	415	50	81	23	20%	5%	3,452	597	51%	7%	21%	5%
Clare	42	10	3	1	8%	4%	182	57	35%	13%	53%	11%
Crawford	64	20	19	11	29%	14%	330	123	60%	15%	44%	15%
Delta	417	50	103	27	25%	6%	3,287	559	53%	7%	18%	5%
Dickinson	326	43	83	23	25%	6%	2,512	433	52%	7%	25%	6%
Emmet	60	20	5	6	9%	9%	268	98	55%	17%	42%	17%
Gladwin	38	4	1	1	3%	2%	160	20	48%	6%	43%	6%
Gogebic	450	52	134	32	30%	6%	3,161	580	66%	7%	22%	6%

<sup>&</sup>lt;sup>a</sup>Number of hunters does not add up to statewide total because hunters can hunt in more than one county. Column totals for hunting effort and harvest may not equal statewide totals because of rounding errors.

<sup>&</sup>lt;sup>b</sup>Proportion of hunters that rated their hunting experience as very good or good. <sup>c</sup>Proportion of hunters that indicated that they experienced interference from other hunters.

Table 3 (continued). Number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunt interference during the 2002 Michigan bear hunting season.

	Hunte	ers <sup>a</sup>	Harv	est <sup>a</sup>		nter cess	Hunting (day		Hur satisfa	nter action <sup>b</sup>		fered ters <sup>c</sup>
		95%		95%		95%		95%		95%		95%
County	Total	CL	Total	CL	%	CL	Total	CL	%	CL	%	CL
Gd. Traverse	0	0	0	0			0	0				
Houghton	448	66	163	43	36%	8%	2,936	650	69%	8%	25%	7%
losco	22	3	1	1	5%	4%	87	16	32%	8%	58%	8%
Iron	350	24	129	20	37%	5%	2,497	297	62%	5%	20%	4%
Kalkaska	67	20	3	4	4%	6%	316	118	28%	14%	36%	15%
Keweenaw	121	38	57	27	47%	16%	584	227	84%	12%	15%	12%
Lake	29	8	11	2	37%	11%	137	77	70%	9%	33%	10%
Luce	604	59	86	26	14%	4%	4,215	567	42%	6%	24%	5%
Mackinac	307	45	77	24	25%	7%	2,180	429	52%	8%	29%	7%
Manistee	6	1	2	1	33%	10%	20	5	67%	10%	33%	10%
Marquette	668	67	193	39	29%	5%	4,283	631	62%	6%	16%	4%
Menominee	492	40	116	26	24%	5%	4,486	562	50%	6%	23%	5%
Missaukee	101	25	38	15	37%	12%	442	139	54%	13%	43%	13%
Montmorency	184	33	30	14	16%	7%	857	180	42%	9%	35%	9%
Newaygo	2	1	1	1	50%	18%	11	4	100%	0%	100%	0%
Ogemaw	46	7	3	1	8%	3%	233	50	35%	7%	49%	8%
Ontonagon	855	66	271	46	32%	5%	5,059	559	65%	5%	18%	4%

<sup>&</sup>lt;sup>a</sup>Number of hunters does not add up to statewide total because hunters can hunt in more than one county. Column totals for hunting effort and harvest may not equal statewide totals because of rounding errors.

<sup>&</sup>lt;sup>b</sup>Proportion of hunters that rated their hunting experience as very good or good. <sup>c</sup>Proportion of hunters that indicated that they experienced interference from other hunters.

Table 3 (continued). Number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunt interference during the 2002 Michigan bear hunting season.

	Hunt	ers <sup>a</sup>	Harv	/est <sup>a</sup>		nter cess	Hunting dav	efforts (s) <sup>a</sup>		nter action <sup>b</sup>		fered ters <sup>c</sup>
	-	95%		95%	-	95%		95%		95%	-	95%
County	Total	CL	Total	CL	%	CL	Total	CL	%	CL	%	CL
Osceola	4	4	1	1	29%	33%	12	17	29%	33%	71%	33%
Oscoda	74	21	8	7	11%	9%	383	124	36%	14%	47%	15%
Otsego	69	21	13	9	19%	12%	371	146	49%	16%	55%	16%
Presque Isle	198	33	32	14	16%	7%	998	201	45%	9%	28%	8%
Roscommon	153	30	24	12	16%	7%	802	187	44%	10%	51%	10%
Schoolcraft	402	51	92	26	23%	6%	2,529	452	56%	7%	27%	6%
Wexford	20	2	6	1	32%	5%	68	9	47%	6%	47%	6%
Unknown	346	51	43	18	12%	5%	1,709	335	41%	7%	30%	7%

<sup>&</sup>lt;sup>a</sup>Number of hunters does not add up to statewide total because hunters can hunt in more than one county. Column totals for hunting effort and harvest may not equal statewide totals because of rounding errors.

bProportion of hunters that rated their hunting experience as very good or good.

cProportion of hunters that indicated that they experienced interference from other hunters.

Table 4. Number and proportion of hunters hunting on private and public lands during the 2002 bear hunting season.

	Р	rivate la	and only	,		Public la	and only		Both p	rivate and	d public l	ands		Unkno	wn land	
Management unit	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL
Amasa	176	22	36%	4%	218	23	44%	5%	89	18	18%	4%	12	7	3%	1%
Baldwin	15	2	26%	3%	30	2	52%	3%	13	2	22%	3%	0	0	0%	0%
Baraga	511	70	30%	4%	758	76	44%	4%	410	65	24%	4%	44	24	3%	1%
Bergland	250	43	21%	4%	704	53	59%	4%	223	41	19%	3%	13	11	1%	1%
Carney	521	38	62%	4%	157	30	19%	3%	152	29	18%	3%	11	9	1%	1%
Drummond	2	1	13%	4%	7	1	44%	6%	7	1	44%	6%	0	0	0%	0%
Gladwin	50	5	35%	3%	74	5	52%	3%	17	3	12%	2%	2	1	2%	1%
Gwinn	281	39	31%	4%	404	42	44%	4%	217	35	24%	4%	9	8	1%	1%
Newberry	504	54	28%	3%	918	61	52%	3%	319	46	18%	3%	31	16	2%	1%
Red Oak	665	49	47%	3%	563	48	40%	3%	177	32	12%	2%	19	11	1%	1%
Statewide	2,975	124	35%	1%	3,833	134	45%	2%	1,625	107	19%	1%	141	35	2%	0%

Table 5. Number of days of hunting effort on private and public lands during the 2002 Michigan bear hunting season.

					Both private	and public		
	Private	lands	Public	lands	lan	ds	Unk	nown
Management		95%		95%		95%		95%
unit	Total	CL	Total	CL	Total	CL	Total	CL
Amasa	1,392	262	1,440	240	583	137	73	53
Baldwin	57	8	124	11	38	7	0	0
Baraga	3,556	673	4,644	653	3,543	805	269	209
Bergland	1,771	391	3,995	478	2,041	521	40	47
Carney	4,895	567	1,169	339	1,277	335	63	67
Drummond	9	4	28	5	33	5	0	0
Gladwin	215	22	333	26	63	12	31	18
Gwinn	1,969	340	2,592	400	1,881	401	199	186
Newberry	3,458	509	6,998	771	3,279	672	255	186
Red Oak	3,363	321	3,003	319	1,062	248	177	127
Statewide <sup>a</sup>	20,683	1,214	24,327	1,297	13,799	1,313	1,107	373

<sup>&</sup>lt;sup>a</sup>Column totals may not equal statewide totals because of rounding errors.

Table 6. Number of hunters, harvest, and hunting effort (days) during Michigan bear hunting season, 1996-2002.

Season, 1990-2002.							
-				Year			
Region	1996	1997	1998	1999	2000	2001	2002
Upper Peninsula							
• •							
Applicants	20,082	21,224	25,620	26,833	31,277	31,666	29,112
Licenses sold	5,428	5,490	5,242	5,818	6,786	8,337	7,393
Hunters	4,705	4,732	4,961	5,511	6,308	6,492	6,949
Harvest	1,154	1,116	1,353	1,590	1,781	1,990	1,962
Males (%)	64	54	59	65	58	59	62
Females (%)	36	45	40	34	40	39	37
Unknown (%)	0	1	1	1	2	2	1
Hunter-days	34,690	34,195	37,123	40,452	45,403	46,719	51,452
Hunter success (%)	25	24	27	29	28	31	28
Lower Peninsula							
Applicants	6,646	7,904	10,295	11,073	13,887	14,674	14,370
Licenses sold	1,040	1,135	1,039	1,062	1,113	1,544	1,711
Hunters	905	961	993	1,005	1,058	1,247	1,626
Harvest	112	199	192	227	230	279	320
Males (%)	61	53	63	64	57	55	70
Females (%)	37	44	35	36	41	45	29
Unknown (%)	2	3	2	0	2	0	1
Hunter-days /	4,051	4,877	4,629	5,069	5,259	6,204	8,465
Hunter success (%)	12	21	19	23	22	22	20
Statewide							
Applicants <sup>a</sup>	26,728	29,128	35,915	37,906	48,696	53,179	51,686
Licenses sold	6,468	6,625	6,281	6,880	7,899	9,881	9,104
Hunters	5,610	5,693	5,956	6,516	7,365	7,739	8,575
Harvest	1,266	1,315	1,545	1,817	2,011	2,268	2,282
Males (%)	64	54	<sup>´</sup> 59	65	<sup>´</sup> 58	<sup>′</sup> 58	63
Femalès (%)	36	45	39	34	40	40	36
Unknown (%)	0	1	2	1	2	2	1
Hunter-days ´	38,741	39,072	41,752	45,521	50,664	52,923	59,917
Hunter success (%)	23	23	26	28	27	29	27

<sup>&</sup>lt;sup>a</sup>Beginning in 2000, the number of applicants statewide also included people that applied for a preference point.

Table 7. Hunting equipment used to hunt bear in Michigan, 2002.

	Number of		
Equipment	hunters	95% CL <sup>a</sup>	Equipment used (%)
Firearm	6,474	124	Archery Both 13%
Archery	1,123	91	
Both firearm and archery	955	81	
Unknown	23	12	Firearm 76%

<sup>&</sup>lt;sup>a</sup> 95% confidence limits.

Table 8. Primary hunting methods used to hunt bear in Michigan, 2002.

	Number of		-
Method	hunters	95% CL <sup>a</sup>	Method used (%)
Bait only	7,117	114	Dogs Only 5%
Dogs only	463	60	Dogs & Bait
Dogs and bait	593	70	Bait Only 83% Other
Other	253	44	Unknown 2%
Unknown	148	36	

<sup>&</sup>lt;sup>a</sup> 95% confidence limits.

Table 9. Hunting methods used to harvest bear in Michigan, 2002.

	Number of		
Method	hunters	95% CL <sup>a</sup>	Method used (%)
Bait only	1,860	111	Other Dogs & Bait 0.9%
Dogs only	134	34	Unknown Dogs Only 6%
Dogs and bait	243	46	
Other	21	13	
Unknown	24	14	Bait Only 81%

<sup>&</sup>lt;sup>a</sup> 95% confidence limits.

Table 10. Level of hunter interference and satisfaction of bear hunters with their hunting experience in Michigan during the 2002 season.

	Hunter success (%)	Hunters interfered by other hunters (%)	Satisfaction level (%)					
Manage- ment unit			Very good	Good	Neutral	Poor	Very poor	No answer
Amasa	36%	20%	29%	31%	20%	11%	8%	2%
Baldwin	46%	44%	39%	22%	22%	11%	6%	0%
Baraga	32%	20%	25%	40%	17%	11%	6%	2%
Bergland	32%	20%	27%	37%	17%	10%	7%	3%
Carney	26%	22%	16%	33%	24%	16%	9%	2%
Drummond	63%	25%	63%	19%	6%	13%	0%	0%
Gladwin	6%	46%	10%	27%	21%	20%	17%	5%
Gwinn	26%	18%	24%	32%	23%	12%	7%	1%
Newberry	21%	24%	18%	28%	23%	18%	10%	2%
Red Oak	20%	37%	18%	27%	21%	16%	16%	2%
Statewide	27%	24%	22%	33%	21%	14%	9%	2%